
A New Species of *Tovomita* (Clusiaceae) from Amazonian Venezuela and Peru

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ABSTRACT. *Tovomita stergiosii*, a new species of Clusiaceae from the Venezuelan and Peruvian Amazonian region, is described, illustrated, and compared to its closest relative, *T. brasiliensis* (Martius) Walpers from Brazil, from which it differs in leaf shape, pedicel length, floral parts, and fruit shape.

Key words: Amazonia, Clusiaceae, Peru, *Tovomita*, Venezuela.

Tovomita Aublet is a Neotropical genus of about 45 species, most of them occurring in Amazonian Brazil, Peru, and Venezuela. They are small latiferous trees or shrubs with stilt roots, occurring in several habitat and forest types, but usually in coastal rain forests in the Amazon. The genus is placed in Clusiaceae by the usually unisexual flowers (plants monoecious, dioecious, or polygamous) in terminal cymose inflorescences, with flower buds completely enclosed by the outer sepals, which are nearly completely fused and splitting lengthwise into 2 to 4 opposite sepals; the decussate leaves, with a margined pit in the axillary part of the petiole; the fruit a fleshy drupaceous capsule with styles often distinct, dehiscent septically to the base, and often brightly colored within, and the seeds large, 1 per locule, enveloped by a fleshy venose aril.

In a recent treatment of the genus *Tovomita* (Cuello, 1998), the name of *Tovomita* aff. *brasiliensis* (Martius) Walpers was tentatively used based on a close match of material from the flora area to the description and illustration for that species in *Flora Brasiliensis* (Engler, 1858: t. 97, f. I). However, examination of additional specimens from Venezuela and Peru revealed considerable differences from the type material for that name, indicating that this material certainly is of an undescribed species. A name, description, and illustration are provided here.

Tovomita stergiosii Cuello, sp. nov. TYPE: Venezuela. Amazonas: Cuenca del Río Casiquiare, selvas y sabanas de arenas blancas del caño Tiramoni (entre los caños Atamoni y Momoni), con entrada hacia tierra firme. 10–22 Feb. 1989 (fl), Basil Stergios, Klaus Kubitzki, Gerardo Aymard & Emidio Melgueiro 13161 (holotype, PORT; isotypes, HBG not seen, MO, NY, TFAV not seen, VEN not seen). Figure 1.

Haec species *T. brasiliensis* affinis, sed ab ea foliorum lanceolatorum basi attenuatorum apice acuminatorum usque caudatorum costa supra elevata subtus impressa (non prominente) ac nervis lateralibus subtus obsolescentibus (non elevatis), pedicellis 9–11(–20) mm longis, gemmis floralibus masculis mucronatis, sepalis 4 exterioribus orbiculatis, petalis interioribus apice breviter dilatatis, staminum filamentis crassiusculis quadratis atque fructu pyriformi in stylum 1 mm vix attingentem desinente differt.

Presumed monoecious treelet, 3–8 m tall. Branches terete, glabrous. Latex whitish, wood with sweet aroma. Leaves opposite, decussate, glabrous on both surfaces, clustered toward upper parts of branches with internodes (3–)4–8(–11) mm long; the petioles plane, 3–7(–12) mm long; the blades membranous, lanceolate to elliptic-lanceolate, (3–)4–10 × (0.5–)1–2.5 cm, attenuate at base, acute-acuminate to caudate at apex, the apex 5–15 mm long, base 1.5–2 mm wide, margin thinly revolute, main nerve elevated in upper surface, impressed beneath, lateral veins inconspicuous in mature leaves, slightly visible in younger leaves but not prominent, less than 3 mm apart. Inflorescences cymoid, terminal, 1.5–3 cm long, usually divided into 3 branches near the base, but secondary flowers of lateral branches caducous, leaving each branch 1-flowered and appearing as a simple dichasium, peduncle 1–6 mm long, terminal internode 6–20 mm long, internodes of lateral branches 3.5–20 mm long; pedicels slender, 9–11(–20) mm long in primary flowers. Bracts caducous, not seen. Flower buds ovoid, 4–5 × 2.5–3 mm, the staminate buds mucronulate, apex ca. 0.5–1 mm long, the pistillate buds slightly shorter and broader. Sepals 4, the 2 external sepals green, coriaceous, fused up to the

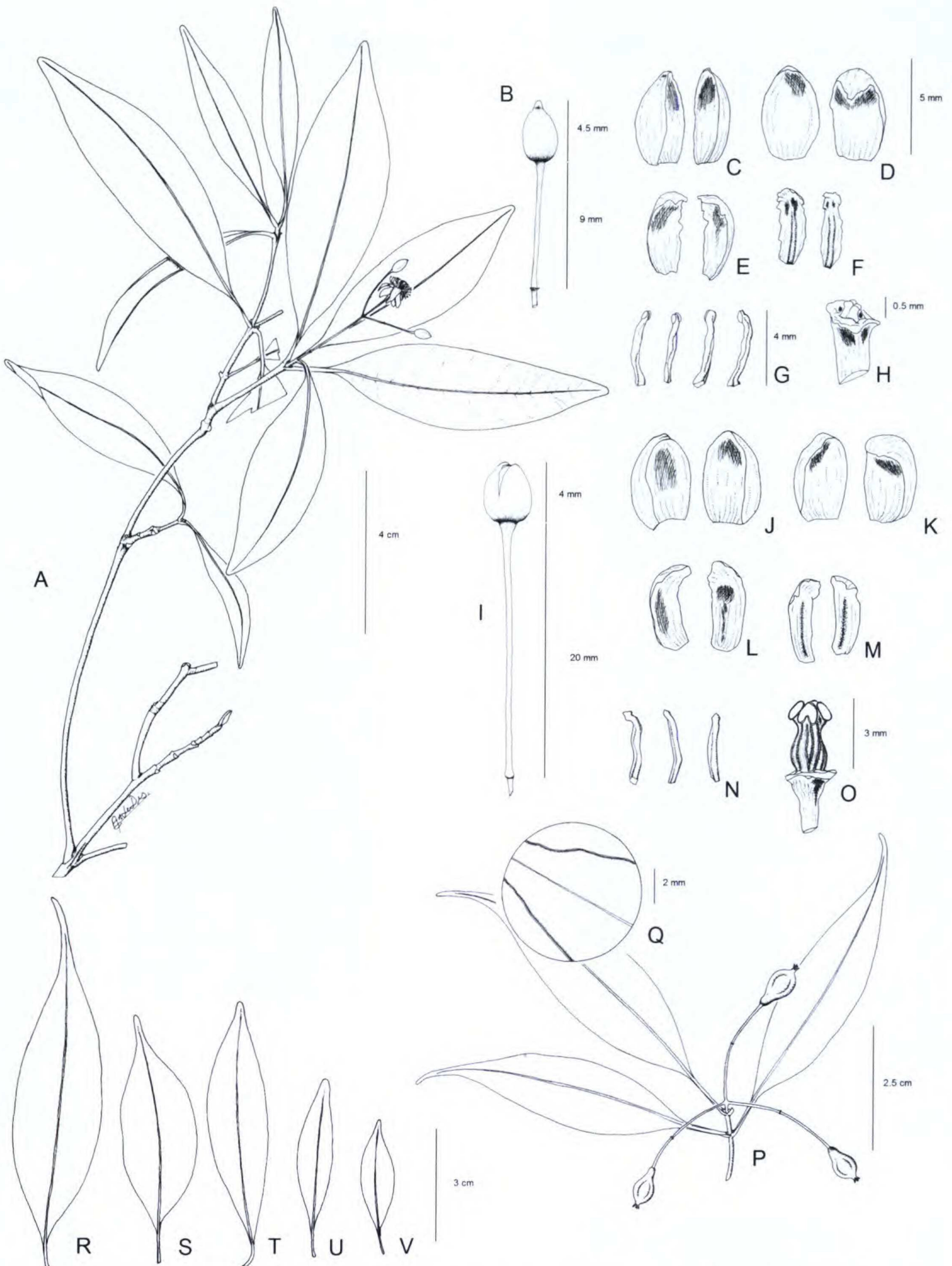


Figure 1. *Tovomita stergiosii* Cuello. Habit with details of flowers and leaves. —A. Habit and staminate flowering branch. —B. Staminate flower bud. —C. External sepals. —D. Internal sepals. —E. External petals. —F. Internal petals. —G. Stamens. —H. Pistillode. —I. Pistillate flower bud. —J. External sepals. —K. Internal sepals. —L. External petals. —M. Internal petals. —N. Staminodes. —O. Pistil. —P. Branch bearing young fruits. —Q. Detail of leaf margin from abaxial view. —R–V. Leaf shapes and sizes. (A based on *Colella et al.* 2016, PORT; B–H and V based on *Stergios et al.* 13161, PORT; I–R based on *Rimachi* 7616, MO; S based on *McDaniel & Rimachi* 20466, MO; T based on *Aymard & Delgado* 8423, PORT; and U based on *Castillo & Camaripano* 8362, PORT.)

middle, 4–5 × 3–4 mm, broadly oblong to orbicular, cymbiform, truncated at base, the outer of the two mucronulate in staminate flowers; the 2 internal sepals petaloid, imbricate, broadly oblong, 3–5 × 2–3 mm, the inner one hooded, narrower than the outer, apiculate in staminate flower, apex ca. 1 mm long. Petals 4, varied in shape, free and distinct in bud, white, 3–5 × 1.5–2 mm, decussate, the 2 external petals oblong, rounded to truncate or sinuate at apex, the 2 internal petals contracted at 1/3 the distance from the apex and shortly widened at apex, the claw 2.5–3 mm long, 1.5–2 mm wide, the blade 1–1.5 mm long, 3–4 mm wide. Stamens ca. 20, filaments moderately thick, tetragonous, ca. 0.5 mm wide, 2.5–3.5 mm long, thecae obliquely attached, 0.5–1 mm long. Staminodes ca. 20, 3.5–4 mm long. Pistil in female buds 2–2.5 mm long, shortly urceolate, wider and slightly angulate at base, ovary 4-celled, styles 4, distinct, 0.5–0.6 mm long, stigmas cordate to rounded, 0.5–0.7 mm diam. Pistillode in staminate buds very small, ca. 0.5 mm long. Fruit a fleshy septicidal capsule, pyriform when still closed, 1.7–2.2 × 0.7–1.4 cm, green externally, pink within, estipitate, with 4 short, persistent, crowned styles 0.8–1 mm long, stigmas rounded in fruit, 0.5–0.7 mm diam. Seeds reniform, arillate, 7.5–9 mm long, 4–5 mm wide.

Distribution and ecology. *Tovomita stergiosii* is a small tree known from shrubby white-sand savannas and edges of inundated lowland forest along blackwater rivers, between 90 and 250 m elevation in Venezuelan and Peruvian Amazonia. The new species is known in Peruvian highland Quechua as “chullachaqui caspi” (*Rimachi* 7615, MO).

Tovomita stergiosii is most similar to *T. brasiliensis* (Martius) Walpers from Brazil, French Guiana, and Colombia (Martius, 1826; Walpers, 1842; Engler, 1858) with regard to habit and leaf features. Both are small trees with terete branches, and both have small, membranous leaves on short internodes. However, *T. stergiosii* differs in having lanceolate leaves rather than oblong-elliptic leaves, with an attenuate rather than acute base and an acute-acuminate to caudate rather than obtuse apex. Additionally, in *T. stergiosii* the main leaf nerve is impressed and not prominent, and lateral nerves are slightly visible on the undersurface. In contrast, *T. brasiliensis* has leaves with a prominent main nerve and its lateral nerves are slightly raised beneath. Furthermore, the flower buds in the new species are mucronulate in staminate flowers, with four sepals, the outer sepal orbicular-mucronulate, the two inner petals shortly widened at the apex.

In *T. brasiliensis*, the flower buds are rounded at the apex, not mucronulate, with only two ovate-obtuse sepals, and petals obovate-oblong and obtuse. Also, the new species differs by its longer pedicels, 9–11(–20) mm long, less numerous stamens (ca. 20) with moderately thick and quadrangular filaments, and a pyriform fruit with short styles ca. 1 mm long. *Tovomita brasiliensis* has shorter pedicels, 6–8 mm long, ca. 50 stamens with flattened, filiform filaments, and an obovate fruit with longer, persistent styles up to 3 mm long.

Among specimens examined of *Tovomita stergiosii*, a variation in the sizes and shapes of leaves was noted, especially in the shape of the leaf apices, which can vary from acute to acuminate in Venezuelan and Peruvian specimens and even to caudate in some of the Peruvian specimens.

This species is named in honor of Basil Stergios (1940–) from PORT, in recognition of his enthusiasm for botanical exploration in Venezuela and for collecting the type specimen.

Paratypes. VENEZUELA. **Territorio Federal Amazonas:** Atabapo, Alto Río Orinoco, Caño Tama Tama, 2 km al E de Tama Tama, 3 Mar. 1990 (fr), G. Aymard & L. Delgado 8423 (MO, PORT, VEN not seen); Casiquiare, Río Casiquiare, Laguna de Paciva y sus alrededores, 8 Feb. 1991 (fl, fr), M. Colella, J. Velázco, E. Guayamare & S. Camico 2016 (NY, PORT); Río Sipapo, cerca de Cerro Pelota, 20 Feb. 2001 (fr), A. Castillo & B. Camaripano 8362 (PORT, VEN not seen). PERU. **Loreto:** Maynas, Iquitos, Río Nanay, Quebrada de Momón, un poco arriba del caserío de San José, Aug. 1984 (fl, fr), M. Rimachi 7616 (MO); Río Nanay, two bends below entrance to Mapa Cocha, 14 Jan. 1976 (fl), S. McDaniel & M. Rimachi 20466 (MO); vicinity of Iquitos (collection data lost), 1977 (fl), J. Revilla 3610 (MO); Río Mamón near Río Nanay, 1 Sep. 1972 (fl), T. Croat 19887 (MO).

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